

Appendix D: Compatibility Determinations

COMPATIBILITY DETERMINATION

Use: Hunting

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority (ies): Established Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Hunting of waterfowl and deer.

Where is the use conducted? Waterfowl hunting occurs along the periphery of the Refuge with 80 percent of the core acreage undisturbed. Waterfowl hunting may occur in newly acquired lands. The core acreage will remain undisturbed. Deer hunting may occur throughout the present Refuge and may be extended to acquired lands within the approved boundaries.

When is the use conducted? The use occurs during the fall and winter.

How is the use conducted? A master hunting plan describes when, where, and how we conduct our hunts. In addition, each year annual plans are submitted, reviewed, and approved with any changes to the program. All hunting activities are planned and operated with the Refuge's primary objectives, habitat management requirements, and goals as the guiding principles. All hunting activities follow applicable state laws, except where the Refuge administers further restrictions to ensure compatibility with the Refuge's primary mission. Hunting activities can only occur in designated areas listed in the hunter's permit and under the restrictions outlined in the same permit. Completing this activity under a hunting plan and special permits allows the Refuge to accomplish its management goals and provide needed safety levels for citizens of the area without adversely affecting Refuge habitats and wildlife populations.

Availability of Resources: Funds are available for managing this activity. Approximately \$18,725 of staff time is required to administer and manage this activity. We estimate that an additional \$1,000 is required for overhead expenses for a total estimated cost of \$19,725 to administer the program. With \$13,000 to \$15,000 returned to the Refuge through user fees, final cost to the Refuge to administer these programs is \$3,725 to \$5,725. Based on a review of the Refuge budget allocated for this management activity, there is adequate funding to ensure compatibility and to administer and manage the use.

Anticipated Impacts Of Use: Continuing this activity has shown no assessable environmental impact to the Refuge, its habitats, or wildlife species. Concerns primarily center around the possibility of impacting threatened and other sensitive non-target species through excessive disturbance. With restrictions limiting access to specific locations, by motor boats along river channels, and non- motorized vehicles in other areas, disturbance is minimized. Disturbance to wildlife is limited to occasional flushing of non-target species and the harvest of individual members of the species open to the hunting season in the periphery areas only. Restrictions to the hunting program assure that these activities have no adverse impacts on other wildlife species and little adverse impact to other public use programs. The activities follow all applicable laws, regulations and policies; including Migratory Bird Conservation Act, 50 CFR, National Wildlife Refuge System Manual, National Wildlife Refuge System goals and objectives, and Shiawassee NWR goals and objectives. These activities are compliant with the purpose of the Refuge and the National Wildlife Refuge System Mission. Operating this activity does not alter the Refuge's ability to meet habitat goals, provides for the safety of the areas's citizens, and supports several of the primary objectives of the Refuge.

Hunting is a priority public use listed in the National Wildlife Refuge System Improvement Act. By facilitating this use on the Refuge, we will increase visitors' knowledge and appreciation of wildlife, which will lead to increased public stewardship of wildlife and their habitats at the Refuge and in general. Increased public stewardship will support and complement the

Service's actions in achieving the Refuge's purposes and the mission of the National Wildlife Refuge System. In addition, deer hunting is necessary to meet the Refuge's habitat objectives and prevent adverse impacts to other wildlife species.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*check one below*):

____ Use is Not Compatible

___X___ Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility: To ensure compatibility with National Wildlife Refuge System and Shiawassee NWR goals and objectives the activity can only occur under the following stipulations:

1. Ensure waterfowl hunting is limited to a maximum of 25 percent of all Refuge acreage and located in the periphery areas along the boundary of the Refuge.
2. All other hunting activities can only occur under a limited permit system to ensure disturbance to non-target species is minimized and activities are operated in a safe manner for the area's residents.
3. Annually review all hunting activities and operations to ensure compliance with all applicable laws, regulations and policies.
4. For acquired lands, legal access must exist for the public, all safety concerns must be addressed, and habitat must be appropriate for the game to be hunted.

Justification:

Waterfowl and deer hunting are compatible uses at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- or 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Fishing

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description Of Use:

What is the use? Fishing

Where is the use conducted? Fishing is restricted to access along river channels. Most locations are limited to boat access; bank fishing along the river channels is permitted only in areas designated in the Comprehensive Conservation Plan. Fishing will be allowed on newly acquired lands that have legal public access, have historically provided public bank fishing, and can be safely fished without harm to the anglers and habitat. The Comprehensive Conservation Plan calls for establishing boat launch facilities. The boat

launches will facilitate access to the rivers of the Refuge and enhance fishing, wildlife observation, and photography opportunities.

When is the use conducted? The use occurs throughout the year according to State regulations.

How is the use conducted? A step-down fishing plan and the Refuge's Comprehensive Conservation Plan describe when, where, and how fishing is conducted. All fishing activities are planned and operated with the Refuge's primary objectives, habitat management requirements, and goals as the guiding principles. All fishing activities follow applicable state laws, except where the Refuge administers further restrictions to ensure compatibility with the Refuge's primary mission. Fishing is restricted to areas along river channels. Most locations are limited to boat access; bank fishing along the river channels is permitted only in areas designated in the Comprehensive Conservation Plan. Fishing under the above restrictions allows the Refuge to accomplish its management goals and provide for the safety of visitors.

Availability of Resources: Approximately \$700 of staff time is required to administer and manage this activity. Overhead expenses associated with bank fishing are estimated to be \$10,000 for a total estimated cost of \$10,700. Overhead expenses associated with the development of boat launch facilities are estimated to be \$250,000. Based on a review of the Refuge budget allocated for these activities, there is currently not enough funding to ensure compatibility and to administer and manage the use. This activity will only be permitted after funding sources have been identified to cover the overhead cost for the program.

Anticipated Impacts Of The Use: Fishing has shown no assessable environmental impact to the Refuge, its habitats, or wildlife species. Concerns primarily center around the possibility of impacting threatened and other sensitive non-target species through excessive disturbance. With restrictions limiting access to specific locations such as motor boats along river channels and walk-in trails to specific bank fishing sites in other areas, disturbance is minimized. Disturbance to wildlife is limited to occasional flushing of non-target species and the harvest of individual members of the species open to the recreational fishing. Restrictions on the size and operation of the boat launch facilities will assure minimal impacts on aesthetics on the river and disturbance to wildlife and other public use activities. Harvests are regulated to take only surplus specimens, thus assuring viable, healthy populations within management and habitat guidelines. Restrictions to the fishing program assure that these activities have no adverse impacts on other wildlife species and little adverse impact on other public use programs. The activities follow all applicable laws, regulations and policies; including Migratory Bird Conservation Act, 50 CFR, National Wildlife Refuge System Manual, National Wildlife Refuge System goals and objectives, and Shiawassee NWR goals and objectives. These activities are compliant with the purpose of the Refuge and the National Wildlife Refuge System Mission. Operating this activity does not alter the Refuge's ability to meet habitat goals and it helps support several of the primary objectives of the Refuge.

Fishing is a priority public use listed in the National Wildlife Refuge System Improvement Act. By facilitating this use on the Refuge, we will increase visitors' knowledge and appreciation of fish and wildlife, which will lead to increased public stewardship of fish and wildlife and their habitats at the Refuge and in general. Increased public stewardship will support and complement the Service's actions in achieving the Refuge's purposes and the mission of the National Wildlife Refuge System.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*Check one below*):

____ Use is Not Compatible

 X Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility: To ensure compatibility with National Wildlife Refuge System and Shiawassee NWR goals and objectives fishing can only occur under the following stipulations:

1. Fishing is permitted only in designated locations using specific routes for access, which will ensure minimal disturbance to wildlife and minimal impacts to their habitats.
2. All fishing activities and boat launch facilities are operated under state laws unless we place further restrictions on the activities to ensure compliance with all applicable laws, regulations and policies.
3. Boat launch facilities can only be constructed in designated locations using specific designs that follow Federal and state engineering plans.

Justification:

Fishing is a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Refuge Chief: _____
(signature and date)

Mandatory 10- or 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Wildlife Observation and Photography

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Wildlife observation and photography

Where is the use conducted? Currently, wildlife observation and photography occurs along and near trails of the Refuge and at observation towers and decks. One September weekend a year an auto tour route is opened to the public. The CCP calls for extending the Woodland Trail along the Tittabawassee River and developing a new trail along the Cass River. The CCP also call for developing an auto tour route along existing Refuge roads.

The proposed Great Lakes Discovery Center in Bridgeport will also provide additional trails and auto tour.

When is the use conducted? The use occurs year-round and is dependent on access.

How is the use conducted? Access for wildlife observation and photography is gained through hiking, bicycling, and cross-country skiing on designated trails and by automobile on a designated tour route. Bicyclers are encouraged not to ride their bicycles on the trails at Green Point Environmental Learning Center due to potential conflicts with educational activities. The new auto tour route will be open during designated hours from late spring through summer, depending on wildlife use and road conditions.

Availability of Resources: Based on a review of the Refuge budget allocated for this activity, there is adequate funding to ensure compatibility and to administer and manage the use at its current level. Approximately \$2,500 of staff time and \$500 of overhead is required to administer this use. Expanding the trail system has been submitted for funding within the Refuge Operating Needs System—\$95,000 for development and \$8,000 for annual maintenance. Establishing the auto tour route has been submitted for funding within the Refuge Operating Needs System—\$170,000 for development and \$10,000 for annual maintenance. We anticipate that \$1,300 of additional staff time and \$500 of additional overhead will be required to manage the expanded trails and auto tour.

Anticipated Impacts of Use: Anticipated impacts from visitors engaged in wildlife observation and photography are minor damage to vegetation, littering, increased maintenance activity, potential conflicts with other visitors, and minor disturbances to wildlife. Because visitors are limited to designated trail access and time limitations may be imposed, wildlife observation and photography has only minor impacts on wildlife and does not detract from the primary purposes of the Refuge. All other potential impacts are considered minor.

Wildlife observation and photography are priority public uses listed in the National Wildlife Refuge System Improvement Act. By facilitating these uses on the Refuge, we will increase visitors' knowledge and appreciation of fish and wildlife, which will lead to increased public stewardship of wildlife and their habitats at the Refuge and in general. Increased public stewardship will support and complement the Service's actions in achieving the Refuge's purposes and the mission of the National Wildlife Refuge System.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*Check one below*):

_____ Use is Not Compatible

 X Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility:

Public access for wildlife observation and photography will be limited to designated areas and with time restrictions to assure minimal disturbance to wildlife and minimal conflict between user groups. Wildlife observation and photography activities will be reviewed annually to ensure this compatibility determination still applies.

Justification:

Wildlife observation and photography is a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- or 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Environmental Education and Interpretation

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Environmental education consists of activities conducted by Refuge staff, volunteers, and teachers. Interpretation occurs in less formal activities with Refuge staff and volunteers or through exhibits, signs, and brochures.

Where is the use conducted? Currently, environmental education and interpretation are conducted at the Green Point Environmental Learning Center and along and near trails of the Refuge. The CCP calls for establishing an

environmental education site nearer the core of the Refuge. The facilities at the site will consist of restrooms, shelter, and picnic tables. These facilities will permit school groups to maximize their time at the Refuge in environmental education activities during a limited school day. The proposed Great Lakes Discovery Center in Bridgeport will also provide additional facilities for environmental education and interpretation. The remainder of the Refuge serves as a sanctuary for wildlife.

When is the use conducted? The use occurs year-round with peak use in the spring and fall for environmental education.

How is the use conducted? Environmental education activities on the Refuge are led by Refuge staff, volunteers, or teachers, who have been oriented to appropriate use on the Refuge. Students are guided through their activities with adult supervision. Interpretive programs are led by Refuge staff and volunteers. Interpretive materials are developed and placed by Refuge staff.

Availability of Resources: Based on a review of the Refuge budget allocated for this activity, there is adequate funding to ensure compatibility and to administer and manage the use at its current level. Approximately \$34,000 of staff time and \$6,000 of overhead is required to administer this use. Reestablishing the environmental education site in the core of the Refuge has been submitted for funding within the Refuge Operating Needs System--\$55,000 for development and \$5,000 for annual maintenance. Expanding environmental education and interpretation at Green Point Environmental Learning Center will cost approximately \$520,000, which will be covered by the Natural Resource Damage Assessment award as outlined in the CCP.

Anticipated Impacts of Use: Anticipated impacts from environmental education and interpretation are minor damage to vegetation, littering, possible conflict with other users, and increased maintenance activity. Minor disturbances to wildlife were considered during planning. Space and time limitations placed on environmental education and interpretation assure that this activity has only minor impacts on wildlife and does not detract from the primary purposes of the Refuge.

Environmental education is a priority public use listed in the National Wildlife Refuge System Improvement Act. By facilitating environmental education on the Refuge, we will increase knowledge and appreciation of fish and wildlife among program participants, which will lead to increased public stewardship of wildlife and their habitats at the Refuge and in general. Increased public stewardship will support and complement the Service's actions in achieving the Refuge's purposes and the mission of the National Wildlife Refuge System.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*check one below*):

☐ Use is Not Compatible

☒ Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility:

Environmental education will only occur in developed areas designated by the CCP or under the guidance of a Refuge staff member, volunteer, or trained teacher to assure minimal disturbance to wildlife, minimal vegetation damage, and minimal conflict between user groups. Environmental education activities will be reviewed annually to ensure this compatibility determination still applies.

Justification:

Environmental education is a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- or 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Permitted Archeological Investigations

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Permitted Archeological Investigations--Permitted archeological investigations are those requested by archeologist who are not performing the investigation for Refuge management purposes (e.g., not for Section 106 of the National Historic Preservation Act).

Where is the use conducted? Permits can be for anyplace on FWS owned and managed lands, but each permit is for specific lands.

When is the use conducted? The use can occur throughout the year.

How is the use conducted? Archeologists request Archaeological Resources Protection Act (ARPA) permits or Antiquities Act permits to conduct “Surveys, limited testing and/or limited collections on lands identified” and “Excavation, collection and intensive study of specific sites described” on Refuge land. Permits are issued by the Regional Director to qualified archeologists when the Refuge Manager determines the investigation will not interfere with Refuge programs.

Availability of Resources: A small amount of staff time will be required infrequently to administer and manage this activity. There is no associated overhead expense. Based on a review of the Refuge budget, there is adequate funding to ensure compatibility and to administer and manage the use.

Anticipated Impacts of the Use: Permitted archeological investigations result in minimal impacts to habitat and wildlife resources. The ground disturbance, however, can be minimal for small scale surface surveys to extensively disruptive for large scale excavations.

The archeological investigations would be conducted in the public interest for which Federal agencies protect archeological sites; and the results may be included in public interpretive exhibits and other public dissemination. The results of the study could increase Refuge understanding of prior human activities on the Refuge and could be part of Refuge interpretive program.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*check one below*):

☐ Use is Not Compatible

☒ Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility: Applicant must obtain a Special Use Permit issued by the Refuge Manager. No special stipulation are necessary to ensure compatibility. The Refuge Manager will issue a Special Use Permit that might have administrative or management stipulations.

Predetermined stipulations on ARPA/Antiquities permits and the requirements in 43 CFR Part 7, “Protection of Archaeological Resources: Uniform Regulations,” require land restoration and other protective measures by archeologists.

Justification:

Permitted Archeological Investigations are a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- to 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Beekeeping

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Beekeeping

Where is the use conducted? Currently hives are near the Moist Soil Unit 1 and along the Spaulding drain. Hives are well removed from the Refuge trail system.

When is the use conducted? The hives are in place year round.

How is the use conducted? A special use permit specifies when, where, and how beekeeping is conducted on the Refuge. In addition, there is a yearly review of activities or concerns before issuing a permit for the following year. The activity requires about once a month inspection of the hives and equipment, removal of honey, and placement of bees.

Availability of Resources: Approximately \$116 of staff time is required to administer and manage this activity. There is no overhead expense associated with beekeeping. Based on a review of the Refuge budget allocated for this use management activity, there is adequate funding to ensure compatibility and to administer and manage the use.

Anticipated Impacts of the Use: Beekeeping is an asset to the Refuge by supporting the pollination of vegetation found in the area. It assists the Refuge in meeting one of its primary objectives, maintaining a blend of habitat types in prime condition for use by wildlife. Adverse impacts of beekeeping on Service interests are minimal. Disturbance to other wildlife by beekeepers or bees stinging members of the general public have been negligible. Placement of colonies along Refuge access roads has minimized any damage to vegetation. Research has shown no evidence of beekeeping activities passing disease to other species of insects or members of the plant or animal community. The activity is also compliant with the purpose of the Refuge and the National Wildlife Refuge System Mission. The activity follows all applicable laws, regulations and policies; including Migratory Bird Conservation Act, Refuge Recreation Act, 50 CFR, National Wildlife Refuge System Manual, National Wildlife Refuge System goals and objectives, and Shiawassee NWR goals and objectives. Allowing beekeeping does not alter the Refuge's ability to meet habitat goals and objectives, provides for the safety of the areas's citizens, and by using special use permits minimizes the burden on the Refuge and staff.

By supporting pollination, beekeeping assists the Refuge in meeting one of its primary objectives of providing a blend of habitat types in prime condition.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*check one below*):

☐ Use is Not Compatible

☒ Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility: To ensure compatibility with National Wildlife Refuge System and Shiawassee NWR goals and objectives beekeeping can only occur under the following stipulations:

1. Activities are to occur only under a special use permit and in areas designated by the permit.

2. Activities can only occur with compliance in the restrictions of the special use permits issued to individuals participating in this use activity.
3. No more than five special use permits will be issued annually.

Justification:

Beekeeping is a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- and 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Farming

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Farming

Where is the use conducted? Farming occurs on 1,182 acres in the Refuge. The location of the croplands are depicted in Figure 4.1 of the Comprehensive Conservation Plan.

When is the use conducted? The use occurs throughout the year.

How is the use conducted? Farming occurs under a cooperative agreement, which is reviewed and signed annually. The agreement requires the cooperator to provide all the necessary agricultural equipment, supplies, and manpower to raise and harvest designated crops. The Refuge provides only the land needed for the program and oversight in the administration and operation of the program. The Refuge receives 30 percent of the yield of the designated crops. Land tracts designated for farming, crop rotations, farming techniques, and special restrictions are detailed in the cooperative agreement and are guided by the habitat and wildlife needs of the Refuge.

Availability of Resources: Approximately \$2,192.00 of staff time is required to administer and manage this activity. We estimate that an additional \$300.00 is required for overhead costs, for a total estimated cost of \$2,492.00. Based on a review of the Refuge budget, there is adequate funding to ensure compatibility and to administer and manage the use.

Anticipated Impacts of the Use: Continuing this activity has shown no assessable environmental impact to the Refuge, its habitats or wildlife species. The activity is currently compliant with the purpose of the Refuge and the National Wildlife Refuge System Mission. The activity follows all applicable laws, regulations and policies; including Migratory Bird Conservation Act, Refuge Recreation Act, 50 CFR, National Wildlife Refuge System Manual, National Wildlife Refuge System goals and objectives, and Shiawassee NWR goals and objectives. This land use activity is tied to Refuge objectives by providing for the maintenance of migratory waterfowl and offering recreational opportunities to the general public. The program is also used to periodically rejuvenate moist soil units, set back plant succession and prevent encroachment of invasive species in some units. Each participant in this program must sign a cooperative agreement which has progressively moved operations away from conventional styles to sustainable agriculture; more beneficial to the environment and wildlife. Examples include prohibiting the use of insecticides, crop rotations developed to reduce the insect and weed problems, the development of grass buffer strips to reduce runoff, use of legumes to increase soil fertility, special guidelines on fall plowing to reduce soil erosion, crop scouting to reduce the dependence on commercial herbicides and fertilizers, and using only pre-approved herbicides from the Refuge list found to be less toxic to non-target species, the environment, and wildlife. Operating this activity does not alter the Refuge's ability to meet habitat goals and objectives.

This program supports a number of Refuge goals and objectives. It supports a blend of habitat types in prime condition that emphasizes the primary mission of the Refuge – migratory waterfowl and their distribution objectives. It also contributes to the Service's mission of maintaining and restoring a optimum blend of nesting, feeding, and loafing habitats for migratory birds. Lastly, it assists in the Refuge efforts to provide a goose hunting program, a wildlife-dependent opportunity that encourages appreciation of wildlife and the Refuge. Farming under a cooperative agreement allows the Refuge to accomplish its management goals without overburdening the time and energy of our personnel.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*check one below*):

_____ Use is Not Compatible

 X Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Shiawassee NWR goals and objectives the activity can only occur under the following stipulations:

1. Activities are to occur on no more than 1,182 acres of the Refuge each year and in areas designated under the agreement.
2. All operations are to be carried out under cooperative agreements encouraging sustainable agricultural practices.
3. Cooperative agreement guidelines are to be reviewed each year to ensure compatibility and the maximum benefit for wildlife using the Refuge.
4. Sellers will be given a 2-year option to continue to farm lands that are acquired within the expansion area. The 2-year option lands will not be included in the 1,182-acre total.
5. Cooperative farmers will be encouraged to move from the wet, core area of the Refuge to acquired lands only if the acquired lands meet the following conditions: the land is presently in crops; the cropland is more than 1,000 feet from any river channel; the cropland does not flood more than once a year; and the seller of the land has been given the option to farm the land for 2 years.

Justification:

Farming is a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- or 15-year Re-evaluation Date: 2016

COMPATIBILITY DETERMINATION

Use: Firewood Cutting

Refuge Name: Shiawassee National Wildlife Refuge

Establishing and Acquisition Authority(ies): Established on Oct. 21, 1953

Shiawassee National Wildlife Refuge was established as part of a dedicated wildlife area in the flood plain area of central Saginaw County. The area consisted of two units, the Shiawassee National Wildlife Refuge administered by the U.S. Fish and Wildlife Service and the Shiawassee River State Game Area administered by the Michigan Department of Natural Resources. Establishment of the Shiawassee Project was authorized by the Migratory Bird Conservation Commission in May of 1953.

Federal acquisition authority used to acquire the federal portion of the dedicated wildlife area were the:

Migratory Bird Conservation Act (16 U.S.C. , 714-714r)
Refuge Recreation Act (16 U.S.C. , 460k-460k-4)

Funds for acquiring the Federal lands were primarily derived from Federal duck stamp sales. The state lands were acquired from Pittman-Robertson Act funds supplemented by state hunting license receipts.

Refuge Purpose(s): Shiawassee National Wildlife Refuge was established under the dual authorities listed above with the following purposes:

... for use as an inviolate sanctuary, or any other management purpose, for migratory birds.”

... suitable for (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered or threatened species....”

National Wildlife Refuge System Mission: The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Description of Use:

What is the use? Firewood Cutting

Where is the use conducted? This activity is usually restricted to brushing and trimming road edges, limbing individual trees, selective cutting of forested lands for habitat improvements, and removal of trees creating a safety hazard to the general public or Refuge staff.

When is the use conducted? The use occurs primarily in the winter when the ground is hard.

The use may be permitted in the summer during dry periods.

How is the use conducted? A special use permit specifies when, where, and how firewood cutting will be conducted. Firewood cutting occurs only in areas designated in the special use permit and when needed as a necessary habitat or maintenance function.

Availability of Resources: Approximately \$116 of staff time is required to administer and manage this activity. There is no overhead expense associated with this activity. Based on a review of the Refuge budget, there is adequate funding to ensure compatibility and to administer and manage the use.

Anticipated Impacts of the Use: Continuing this activity would have no assessable environmental impact to the Refuge, its habitats or wildlife species. The activity is also compliant with the purpose of the Refuge and the National Wildlife Refuge System Mission. The activity follows all applicable laws, regulations and policies; including Migratory Bird Conservation Act, Refuge Recreation Act, 50 CFR, National Wildlife Refuge System Manual, National Wildlife Refuge System mission, and Shiawassee NWR goals and objectives.

Conducting firewood cutting under special use permit allows the Refuge to reduce the time and energy burden on maintenance personnel, achieve needed facility maintenance, and meet habitat goals and objectives.

Public Review And Comment: This compatibility determination was part of the Draft Shiawassee National Wildlife Refuge Comprehensive Conservation Plan and Environmental Assessment, which was announced in the Federal Register and available for public comment for 30 days.

Determination (*check one below*):

☐ Use is Not Compatible

☒ Use is Compatible With the Following Stipulations

Stipulations Necessary To Ensure Compatibility: To ensure compatibility with National Wildlife Refuge System and Shiawassee NWR goals and objectives firewood cutting can only occur under the following stipulations:

1. Activities are to occur only under a special use permit and in areas designated by the permit.
2. Activities can only occur when needed as a necessary habitat and facility maintenance function.

Justification:

Firewood cutting is a compatible use at Shiawassee National Wildlife Refuge. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Signature: Refuge Manager: _____
(signature and date)

Concurrence: Regional Chief: _____
(signature and date)

Mandatory 10- or 15-year Re-evaluation Date: 2016